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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,826	08/31/2005	Francisco Jose Osse	43279.52.3	1056

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INTELLECTUAL PROPERTY GROUP  
FREDRIKSON & BYRON, P.A.  
200 SOUTH SIXTH STREET  
SUITE 4000  
MINNEAPOLIS, MN 55402

EXAMINER
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SCHILLINGER, ANN M

ART UNIT	PAPER NUMBER
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3738

MAIL DATE	DELIVERY MODE
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06/15/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/509,826

**Applicant(s)**

OSSE ET AL.

**Examiner**

Ann Schillinger

**Art Unit**

3738

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 7/1/05.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☒ Other: Attachments A, B.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3-5, 8, 9, 11-13, 16, 17, 19-21, and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Snyders (US Pat. No. 6,540,782). Snyders discloses claims 1, 9, and 17 as shown in Attachment A. The central connector is element 32 and the membrane is element 22. The struts curving inwardly can be seen in Figure 5 and the struts curving outwardly can be seen in Figures 2, 4, and 6.

Snyders discloses the limitations of claims 3, 4, 11, 12, 19, and 20 in col. 4, lines 48-53.

Snyders discloses the limitations of claims 5, 13, 21, and 20 in col. 4, lines 56-58.

Snyders discloses the limitations of claims 8, 16, and 24 in col. 6, lines 51-57.

Claims 25, 27-29, and 31 are rejected under 35 U.S.C. 102(e) as being anticipated by Bailey et al. (US Pub. No. 2001/0021872). Bailey et al. discloses claims 25 and 29 as shown in Attachment B. The membrane is element 28.

Bailey et al. discloses the limitations of claims 27 and 28 in paragraph 0021 and Figures 15 and 17.

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Bailey et al. discloses the limitations of claim 31 in paragraph 0052.

Claim 33 is rejected under 35 U.S.C. 102(b) as being anticipated by Johnson (US Pat. No. 5,449,384). Johnson discloses claim 33 as follows: a venous valve replacement for use in a human vein comprising: at least three struts (110, 112, 114) of equal length approximately equal angles from each other (see Figure 2; col. 3, lines 30-52), at least two support wings (118, 120, 122), a central connector (116) for the struts and the support wings, and at least two membranes (506, 508, 510, 512, 514, 516) forming a valve connected to the struts.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 10, 18, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Snyders or Bailey et al. in view of Lane (US Pat. No. 6,371,983). Snyders and Bailey et al. disclose the invention substantially as claimed, however, they probably do not disclose struts having different lengths. Lane teaches struts having different lengths in col. 5, line 35 through col. 6, line 31 and col. 7, lines 37-67 for the purpose of giving the valve nonlinear spring characteristics. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to give the struts different lengths in order to give the valve nonlinear spring characteristics.

Claims 6, 14, 22, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Snyders or Bailey et al. in view of Martin (US Pat. No. 4,683,883). Snyders and Bailey et al. disclose the invention substantially as claimed, however, they probably do not disclose an aperture to hold a guiding device. Martin teaches an aperture to hold a guiding device in col. 4, line 46 through col. 5, line 41 for the purpose of holding and positioning the valve. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have an aperture to hold a guiding device in order to hold and position the valve.

Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey et al. in view of Snyders (US Pat. No. 6,540,782). Bailey et al. discloses the invention substantially as claimed, however, Bailey et al. probably does not disclose using a mammalian tissue to construct the membrane. Snyders teaches using a mammalian tissue to construct the membrane in col. 6, lines 24-67 to utilize the material's biocompatibility. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a mammalian tissue to construct the membrane in order to utilize the material's biocompatibility.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ann Schillinger whose telephone number is (571) 272-6652. The examiner can normally be reached on Mon. thru Fri. 9 a.m. to 4 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott can be reached on (571) 272-4754. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

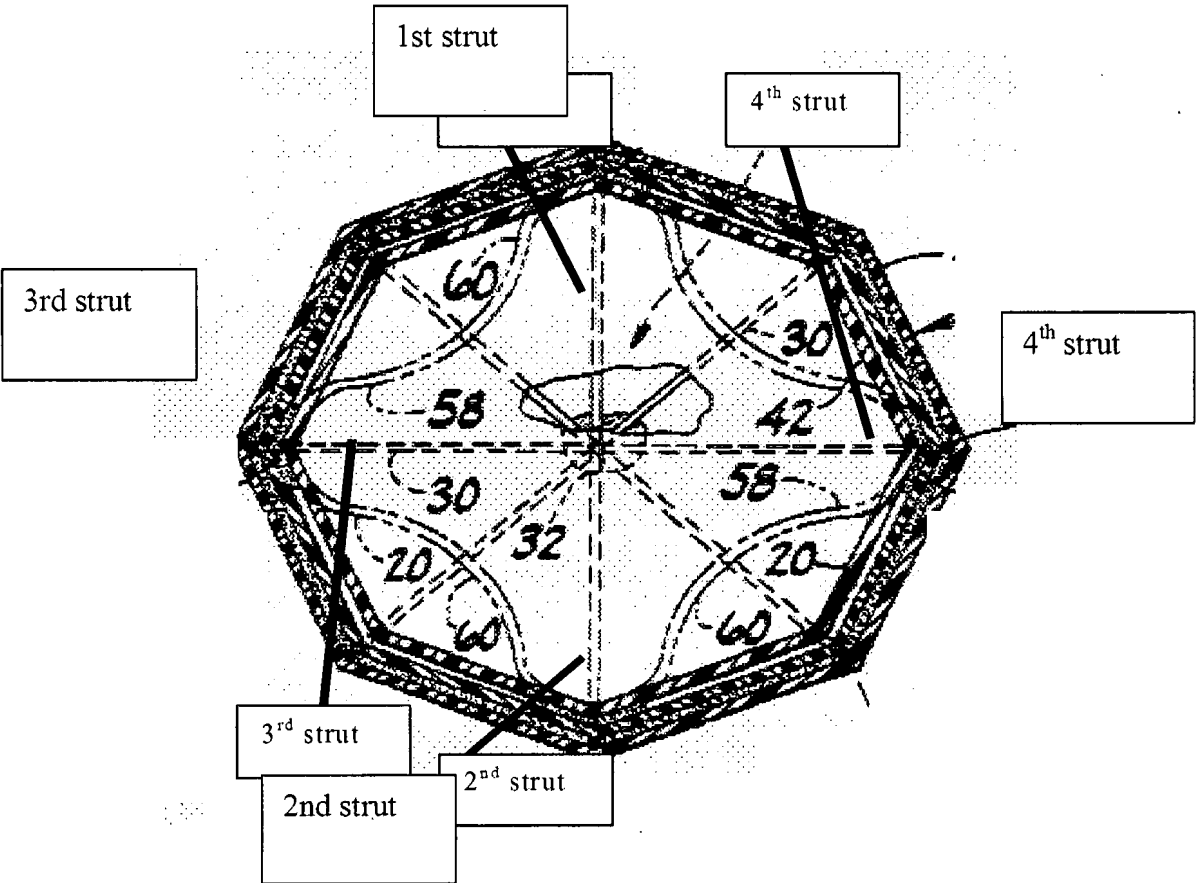
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ann Schillinger  
June 8, 2007

*A. Stewart*  
ALVIN J. STEWART  
PRIMARY EXAMINER

Attachment A



Attachment B

